PERMACULTURE IN URBAN AREAS & URBAN-RURAL LINKS

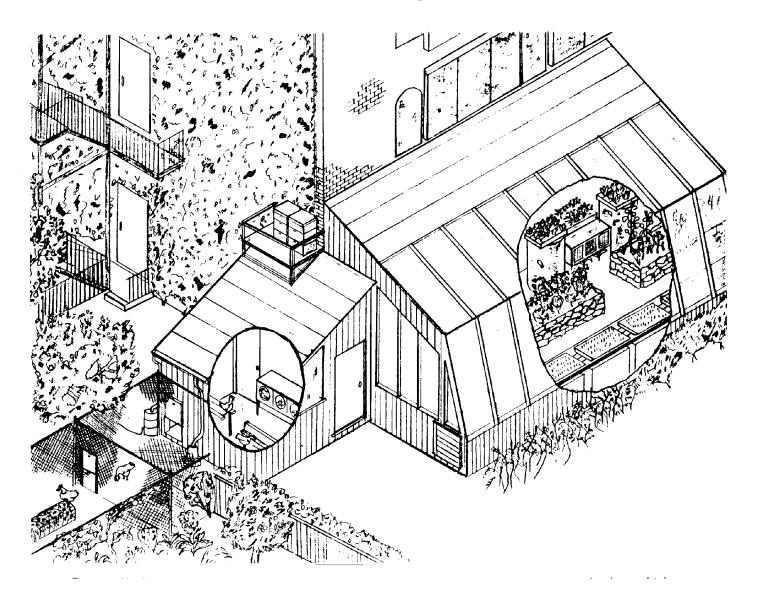
BY BILL MOLLISON

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PERMACULTURE FOR URBAN AREAS & URBAN-RURAL LINKS

This is the twelfth in a series of 15 pamphlets based on the 1981 Permaculture Design Course given by Bill Mollison at The Rural Education Center, Wilton, New Hampshire, USA. Elizabeth Beyor, without compensation, transcribed the tape recordings of the course and subsequently edited the transcripts into 15 pamphlets. Later, Thelma Snell produced the typescript for all pamphlets. Lisa Barnes laid-out and made mechanicals of the original editions. More recently, Meara Culligan entered all 15 pamphlets onto computer disk, permitting use of easier-to-read typefaces. At each juncture, I have added some further light editing to increase the readability of the pamphlets.

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For Mother Earth

Dan Hemenway, Sparr, Florida. USA, August, 2001 Fifth edition

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The urban scene is very interesting. As far as design goes, we apply very much the same principles in tiny areas that we were applying to larger areas. In the urban areas, you may have very little growing space. Then your main strategy is the choice of plants.

It is here that we must start to throw out slow bearing and low yielding plants, and perhaps start to abandon things like bush peas and bush beans. Go to trellises. Attend to trellising, because your vertical dimension is your greatest area.

Trellis as much as you can, if space is very restricted. If you have tall walls, you can trellis up and produce a lot of crop on vertical surface. You can do modest turf roofing on little roofs for herbs and things.

Often enough, because of the arrangement of old houses, where you don't have much southern exposure, the only strategy is to put a glasshouse within the roof. While it can grow some things, it is basically a heating system. It needs to be an active system; you will have to use fans. You just take the air down to the heat store. So you will need to go climbing around and looking within the roof, under floor spaces, and under stair spaces, and be prepared to use much trellis material.

You often can use reflecting surfaces to good effect – old mirrors and aluminum foil will light up dark corners. A friend of mine haunted a mirror place, and got hundreds of strips of mirror that he put to use on a tiny house. The whole house was half as big as this room, with a tiny yard. He built up a fantastic reflector down on that yard. He reflected a lot of light back into the shade situation. Apart from that, there isn't a lot you can do.

The vegetables you plant will be lettuce, zucchini, and peppers – those long-producing, high-yielding things. Encourage the use of as much glassed-in area as you can for the obvious reason that you get far more continuity in production, and far more controllable production. Do much shielding from wind.

In urban areas where buildings are brick or masonry, ivy is a very important shade plant, and it provides good external insulation. Where you cannot put up a little evergreen hedge to guard from cold wind, grow ivy on the wall. Let it grow thick. Our findings are that where you have a spring and autumn season in a highly variable climate, ivy alone can prevent 70% of the heat gain in the house. It is not quite as efficient at preventing radiant heat escape. It is only as good as 40% at that. What it does is check that rapid lateral flow of cold north-westerly winds that would otherwise go screaming along the walls.

If you are going to use trellises on wooden walls, you need to organize it out

from the walls. Box your trellis in and stop the wind that way.

As a designer, you will spend as much time laying out one of those small urban systems as you will a hundred acres, because it is far more careful work that you are up to. In the urban setting, lot size is critical. A suburb with lots not more than a half acre and not much less than a quarter acre can produce 28% more than the same amount of crop land that the suburb occupies. If you give people too much land, they tend to put it into lawns; and if you don't give them enough, they tend not to garden. The average quarter-acre lot seems to be an ideal lot size to produce gardens.

You can get poultry on a quarter-acre suburban lot. Don't recommend roosters, or peacocks.

The main thing to encourage in the city is a set of social strategies. There are many city people who cannot get direct access to land. I will run through those systems that we know of that are working. Probably you know about others.

The first one would be the allotment system, normally one-eighth acre plots. You can get access to these either through the community gardening organizations in America, or public lands in Britain.

Within Britain, they have a system that is a post office listing of people who want land, and opposite, a listing of people who have land. It is public. It is posted up in the post offices. You can go in and write up whether you want land, or you can write up whether you have land. What it has successfully done is match up many youngish gardeners with a lot of older people who are no longer able to keep their allotments or yards in order. It is generally an unspoken thing, as most things are in Britain, that if you are using somebody's garden, you don't pay rental, but you give them some vegetables. That is generally the way it operates. That system has been extraordinarily successful in locating land within the city for garden usage. Some landlords with an itinerant group of people prefer to let the garden of that house to a permanent resident

In Australia, much of the land reverts to the local authorities because absentee owners don't pay the rates and taxes. To locate these blocks of land, you must go to the local authority. We have done this. Then we bring in trucks and do a heavy planting over it. We make little paths, and put in water and sprinklers and hoses. Then in a ceremony, at which the mayor is often present, we donate it to the surrounding house owners. We give it to them as a food park. We hand them a sprinkler and a gladiolus, and everybody shakes hands. And we invite the press. You will find then that they keep that gar-

den very well. Not one of those garden projects has failed.

You first have to find the land that the council owns. It is usually a neglected, boarded up lot. Ask the local people if they would like it. None of them ever say, "No." Then you go in and do the initial landscaping, because in poor neighborhoods they often have not the resources for this. We do stone block beds, and paths. The council often instructs their employees to drop off additional sawdust for paths, or leaves for mulch. Then we have a day we all landscape it - council, residents, anybody else who is a garden freak. We plant it up, and then we present it to them. Everybody has a good time - cook a few chickens.

You have to work with the local authority. They often are pleased to get rid of those areas. The property still belongs to your local councils; but, in effect, it has been given to the residents. There is no formal handing over of title; but if they tried to take it back, they would be voted out of office, so they just leave it with the residents. I have been back to see four of those places that I was involved in, and after three or four years they all still look good. I have been told by the councils, too, that they are very successful. This is right in the middle of an industrial urban neighborhood area.

The director of parks and gardens in that area is a permaculturist, and many of the gardeners in the city are, too. Instead of planting out all the trees that the council hands them, they grow potted trees that look as if they are decorative trees but, in fact, bear much edible fruit. Throughout the whole city of Melbourne, many fruit trees are now going in along streets and in parklands.

The garden club works very well. It is particularly suitable to low income groups who are really strapped, like highrise people. It has to have an organizer, somebody devoted to it. The garden club operates very well in the Netherlands and places where land is very tight.

As an organizer, you get a large group of people to buy a farm with quite formally issued shares, fairly cheap. You can buy a \$100,000 farm with a hundred \$1,000 shares, \$100 down, and the rest on time. You will have to negotiate the whole thing. It must always be accessible by public route. That is critical when people aren't well off. It must be where they can get to it by train or bus. You have to dicker with the local authorities; but you can often put overnight camps on it, and central toilet facilities.

Most people will move out there on Friday nights to spend the weekends. I've known camps of little caravans or small sheds that people make up from what they can salvage in the city.

You can then design the whole farm to include some forest, some lakes, some fishing, and then many allotments. It is often opened to the public to stroll through. They tend to grow quite a lot of flowers as well as vegetables, so they are quite pleasant places. That has been very successful.

Farm link is happening in the state of Victoria and is also operating in Japan. You link a small grower to 20 or 30 families in the city on a personal basis. They guarantee to buy his crop, and he guarantees to try to meet their needs in production. They meet and plan for the whole year. He tries to give them accurate estimates of crop harvesting times. They make a little schedule so they will be prepared to get all their apricots when they are ready, and get their peas and freeze them. That way, he will not be running in with these things at some time when they are not ready to take care of them. So the whole thing is discussed and mapped out for the year. It gives the farmer better than the wholesale price, and it gives the urban people something less than retail price. Everybody benefits. [Mollison describes her what has become the CSA system.1

It is very common for those people to assist with labor at critical periods, and the farmer can easily arrange that, so that he can prepare to plant or hill up potatoes, or harvest on weekends. They arrange weekend work schedules. This labor is credited to those who work.

Another thing that has been happening in Australia is that the farmer is often able to provide mulch to urban gardeners, and they are often able to buy things for the farmer. They are on the spot to get spare parts for him, or to send out a grocery order for him, so that he is not under the necessity of visiting town and getting lost, and wasting hours just getting a single bolt. They can make these purchases and get them to him quickly. Everybody benefits.

It has gone beyond that with some of our people. They have built small shelters out on the farms for these people to come for family holidays. Again, there is a charge, but it is a very reasonable charge, much less than they would pay to go on holidays elsewhere, and they have a personal interest in the farm. They help with tree planting. That is working out very well. The Victorian government set it up, intending that the urban people should get some idea of the difficulties facing the farmer in terms of climate and crop, and it largely took off on its own, It is working to cut out the middleman and the markets, which the government never intended.

It's precisely the same way in Japan. So far as I know, it works very well

there. Many people in the city are not fullon gardeners; they don't have access to land. For these people, this is a good strategy. We call it farm link.

In one case, a certain scout group that camps on a farmer's property does all the tree planting. An adult education group also has a single farm link where they go for all their educational requirements, and they are housed there. As a result the housing has been improving all the time. Their money helps to improve their accommodations.

We are running a close thing to it ourselves. We have friends in Melbourne who come over for summer holidays so their children can enjoy the beaches. They help us, to help pay for their accommodations, and accommodate us in the same way in Melbourne. So we have an urban-country link.

We have found that one of the things that urban groups can do for farmers is to assist in legal and accounting procedures for the farm. The British have another thing going called Working Weekends on Organic Farms [WWOOF]. That is extraordinarily popular. It is going on both in Australia and Britain. About 68% of the people want to break out from the city and town, but are often very uncertain about their abilities. Working weekends on an organic farm gives them the opportunity to visit with people who are already out, and find out how to put up fence, cut firewood, plant crops, harvest crops, and service machinery. That works very well. They pay to go and work and learn. Traveling around, we have come upon several farms whose major solid income is from accommodating city people. Most of the people come during the children's holidays. The farmer has a little trout stream for fish, and he supplies firewood at no charge. The visitors help him with herding. I think this urban-rural work exchange is something we should work on. [WWOOF now operates in many

There are surpluses of material by building sites. A scouting group in town can often locate glass, good solid fencing, building materials, doors and windows, just at scrap prices. These are expensive in any rural area. So we find there are many beneficial linkages possible.

Another fast building thing, which is now widespread, is the food cooperative. Initially, they were just a good strategy within town. I think there are 40,000 of them here in the United States. They are strong and fairly well organized, too. Each of them commonly involves four to five hundred people. Some of those food coops are now buying a farm and putting a manager on it. There needs to be a key person who says, OK, this coop is going to own a farm and grow its own vegetables,

and I'll find the manager and I'll find the farm and I'll find out about the financing.

In urban areas, I always find myself working more on strategy than I do on designs. It takes a little while to find land, but it's always there. The last one we designed was an 18-acre city farm in Melbourne. An unemployed group supply hardware or work. It is sort of a demonstration site for city people to come and see what works. Here is where you get to use urban sheet mulch. They design and build attached glasshouses. There is an empty factory nearby where these kids can construct the frames. They can plant for you a complete herb garden. They will supply the plants and plant it for you. The idea of this group is to demonstrate a whole range of things which people can use within the city. This makes them a retailer of other people's hardware. They sell everything from stock ponds to windmills. The people of Melbourne Rural Institute of Technology, who are architects and engineers, are cooperating on it.

The core group is a sort of permaculture association in that district, and we ourselves were the designers. We have those 18 acres full up with design systems. Some of it is park walkway for the public. It is part of a large parkway we are now developing. There is a large picnic area where people can drive in and just eat. A perfectly ordinary house on the site that is being retrofitted. There are two or three little ponds. All sorts of demonstrations are going on there.

The city farm in Britain is slightly different, very tiny, and right in the city. What they are really aiming to do is to hold a very wide range of common farm animals under perfectly ordinary conditions. They have milk cows being milked and giving birth to calves, and goats and geese. This is more so that city children have something to look at which gives them some relationship to reality. There are 46 of these city farms. They all occupy very deprived areas where children have never been on a farm in their lives. Those children are there just gaping at cows being milked, and piglets suckling.

If they didn't have any rates and taxes, they would be a little economic unit, because they produce milk and cheeses and some spare stock. They also grow rabbits, worm beds and such things. They are very busy places. A lot of very tough youngsters run around there, mucking out and doing chores. These places could be self-supporting, but they do need the wage of a manager. Many of the city farms of London are voluntarily staffed.

But they don't quite make it financially. They are not an economic farm unit. They have to buy in their feed. They haven't

enough land, ever, to produce it. Most of the British city farms were originally urban dairies. They just bought feed and sold fresh milk. They have been squeezed out by the price of land. They were economic units until the price of land started going up. In 1982, they were 85% self-funded by local sales and services.

In Australia, a friend of ours went around the city looking at all the chestnut trees and selecting good chestnut trees for grafting. He suddenly realized he had looked at three or four thousand chestnut trees. So! There were already a lot of chestnuts in the city! He then went around to the owners and offered them a wholesale price for their chestnuts, which in Australia is \$2 a pound. They were all quite happy, because hardly any of them wanted more than a couple of buckets of chestnuts, while their trees produced hundreds of pounds. I first met him when he was up into the second year gathering chestnuts, and he had sold \$70,000 worth of chestnuts that year, retail, which enabled him to buy a farm and start grafting chestnuts. Then he started to sell grafted chestnuts. He had a selection of thousands of trees to graft from. He has now developed the most successful grafting techniques in the town, and he is selling his grafted chestnut trees off at \$15 each. I suggested to him that he also freeze a large quantity of selected

He has made a special study of grafting. You graft chestnut according to the color of the nuts. There are dark brown and light tan and medium tan nuts. It is no good trying to graft a dark brown nut tree onto a light tan stock. So he sets out all his stock from dark brown nuts from his good dark brown trees, and he grafts to them. His success rate just went out of sight. That was something that nobody had ever taught him, and I don't think it has ever been recorded. He selects good seed, that he knows produces good chestnuts. He sells it to us cheap, and everybody can grow nuts at home.

Further, this man is suggesting to people who have room that they plant a chestnut tree. He gives them the tree, providing they contract their excess nuts to him. He has no trouble if people move, in talking to the next owner and saying, "I'll buy your chestnuts."

He has made a specialty of the chestnut. Yet, he started off without ever owning a chestnut tree. He is presently very well off.

Within the city of Melbourne, and within the city of San Francisco, there are about half a million citrus trees in people's back yards. Most of that fruit falls to the ground. In San Francisco, Jamie Jobb

has started collecting this unwanted fruit. He gives it away.

In the city of Adelaide, there is a man running 9,000 sheep, which is a very respectable amount of sheep.

Each of these sheep rents out at \$6 a week. He will place the sheep in your overgrown yard or somewhere at \$6 a week. He shears it and drenches it. He owns a shearing shed in the suburbs, and a pickup truck and trailer, and he goes around and brings them in lots of one hundred or two hundred, shears them, and goes back out and drops them off again. The demand exceeds his supply.

Adelaide, and many of our areas, do not allow homeowners to have wild grass because of the fire hazard. It is quite expensive in rough ground to have someone mow and clean it up. So this man leads sheep in to reduce that fire danger. They get a sheep for a week at a price they would pay a man for an hour. And a sheep working for you in this situation does a lot more than a man. It is up to the property owner to fence the sheep.

This is an entirely different urban strategy. You look upon the city as a farm that already exists. It has very large areas for grazing. It always has plenty of surplus fruits and nuts, and all you have to do is organize it.

Another thing that is happening within cities is the group cooperative processing units. Australian immigrants – the Greeks and Italians – buy and install presses and vats for wine. You weigh in your grapes, and you can either get your grape juice back or take a proportion of the vat wines. That is quite a jolly affair. Throughout Australia, there are nut growers coops with centralized cleaning and packaging machinery.

We have hardly touched upon this whole subject. I believe that well-off people who can afford to put in processing machinery, and put it on rental in their district, should do so. Then everybody has access to a grain grinder locally. It should be the same for distillation, steam distillation, fine oil separations, oil fraction separation. We are urging this upon individual clients. We have some of these projects under way now. People need to press olives. It is a couple of hours work. They need to press their sunflower seeds.

In Yugoslavia, in the foyer of every town hall in small towns, there is an enormous large brass thing big, nearly two stories high. That is the town still. People bring in their plums. They are weighed in, and then the local council, or city council, issues slivovitz (plum brandy) in proportion to what you brought. The town distills it for you. If you have a bag of potatoes that are going off, you run it in to a fermenting center. They know the equivalent and you get that much alcohol

fuel, paying only for the distillation. All these things must be local, of course, must be within fifty kilometers, normal movement range.

In 1979, in Germany, as a result of some years of research delegated to universities and to agricultural departments in Europe, there was a conference on future agricultural trends. They came up with 17 findings, of which the first three were these: They saw a return to small farms, particularly specialized farms from a half acre to fifteen acres. I, myself, have seen some of these farms, and they are doing right well. A 12-acre farm, working on just organic grape juice, grosses about \$70,000 a year. They saw an increasing demand for self-pick and wayside sales. There is already a strong trend toward that. They foresaw that organically produced products would be the only products on demand in the future.

Agricultural college people from Australia and Canada, the United States and Europe attended that conference. However, the work was done in Hamburg, Germany. This cheered me up, because I feel as though it is sort of heading in the right direction: Small farms, organic products, and self-marketing systems.

There are aspects of this that might interest us as permaculture designers. Let us consider the self-pick sales. The ones that I have seen in operation suffer the most from people. They still pay well. The most successful one I've seen is a very simple set-up in Britain, a small-fruit production. lt had gooseberries, strawberries, loganberries and black and red currants. They had much broader intercrop spacing than is usually the case, and they had made quite large mounds upon which the fruit grew. Those gooseberries were all right. No worry about people knocking the plants about. But they were moving out of raspberries. Strawberries also come in for a lot of trampling, but their strawberries were coping with it because they were mounded up and well mulched with sawdust. Although the crop density was low, the returns were very high. You could eat all you wanted to. People, in fact, don't eat much fruit. They are not very apt to get down two pints of strawberries, and they pick six and pay for six. You don't take into account that they have eaten two. This has been very successful. But there are design aspects to it that we should probably try to get at.

For the small farmer, the farmers' market is very good. The problems with these are mostly organizational. It pays the farmers to control the market space. Wherever they haven't done so, the rentals are always jacked up until the small general farmer can't afford it, and

the whole market turns into a commercial operation trucked in, which is not what any of the local farmers wanted it to be. The necessary strategy is to get hold of the space, either by ownership or long-term lease. We have found one of the best things is to buy a set of old warehouses, then turn it over to marketing groups.

On most weekends between 9:00 a.m. and 3:00 p.m., people with a stall would take in between \$300 and \$400. For many small farmers, that is a sufficient income. I have friends who have completely built their house from this kind of market income. One or the other of a couple can run the market, and the other one can hold a job, or can work on the farm

Farmers' markets in Tasmania are open one day, either Saturdays or Sundays. They are held in the cities, of which we have only two, and in the country towns. They are regional markets. They deal with a very broad range of merchandise. They deal with handicrafts, seedlings, small poultry and small animals, settings of eggs, as well as eggs, old clothes, breads, baking products, preserves, jams, fresh herbs and dried herbs, and some are really into things like soaps and shampoos. Oils, essential oils, rubbing oils, massage oils, and there are always a few religious groups in there. Bands are playing and there are hot drink stalls. Now that's a very good income. We made about \$600 one weekend just with hot soups and things at the markets, and with strawberries and cream and coffee. They are great places that you can set up to assist the local people in their endeavors to make a viable economy in rural areas.

The wayside stalls, largely, are never manned. Now this is the way to get rid of main crop. You can put a mountain of pumpkins out there and they go off a few at a time, so you get rid of many of them. Wayside stands usually operate on the honesty system. They have a slot box for people to put the money in.

Sometimes people take the money, but very few people take the product. It is just not worth manning wayside stalls. You put your produce out in handy \$1, \$2 and \$5 lots, and put slots in the table for people to drop the money into. The closer you get to town, the more likely you are to get your money box cleaned out. The wayside stall is for main crop. You might put in four acres of pumpkins. You won't get rid of them at a farmers' market verv easily, but you will get rid of them at wayside stands. Wayside stands can also operate as shared enterprises, because they run all the week, and not everybody has a stall on a good traffic lane. So what you try to do is get joint leasing of a site

that somebody owns, giving them a small income, and you can dump your products there, under some understanding with the person who owns the site. That is commonly done.

Another excellent way to sell is door to door. The best way to sell door to door is not in town; it is in the country. Much larger quantities are purchased per home in the country than in town. In town, people don't buy large quantities of food. I have never made less than maybe \$300 a day, door to door. I used to do door to door every day. You get many cups of tea, bread and butter, and interesting conversations. Providing you can be fairly regular, you do right well. They want to see you on Thursday, and they want some idea about what you might have.

It was in 1951 that I was running a market garden and door to door sales on my own. I made thousands of dollars. I just did it for a year-very boring business, making money. It is! It was 1951 when I grew a crop of sweet corn. I had about an acre of it. It went very well. I put it in a basket and went around with it, and people said, "What's this stuff? What do you do with it?" Nobody knew what it was. I iust knew what it was myself. It was the first year in which it was grown in Austrália. So what we did was wrap it up -- and this is what you must do with all new crop - we wrapped it up in a sheet of recipes and gave it away in a pair of ears. So if you get a very new crop, you should give the first lot away, and with recipes. When we first started baking, we gave little loaves of bread away. When we came back with sweet corn, we had no trouble whatever selling all we could produce. We even sold enough for people to freeze.

How do you set your prices? We always sold for less than the retail price in town. Many people go for a premium price on organic products. I don't think that is very fair, because it costs us less to produce, and when people are getting benefited for less cost, you can get rid of as much as you like. If you want more than \$400 or \$500 a week, you are off your head.

It was here in this market garden that I made my gross error. I laid down 12 acres of market garden on my own. I never saw eight acres of it. What a person forgets is the picking and pulling of it. I just invited people to come in and harvest the rest of it, because I never even saw it. I had an old Farmall tractor and just laid the whole lot down. But I never thought it all out; I was just picking for months and months. I had good moist cropland, good humus, a drained swamp. What all this means is that you should be recommending to your clients ways in which they can make their living, and you

should have a full knowledge of these strategies.

I've noted here, and increasingly, that farmers are drawing more of their living from really social involvement, by running field days, offering recreational and sports holidays, or riding or trail facilities, by temporarily keeping people's horses or cattle. Most farms in Tasmania that are next to wilderness areas are doing very well. They offer accommodations and run some riding horses, with long trail roads. There aren't many of them, and they are always overbooked.

As designers, we should adopt the pioneering approach with our first designs, our first clients in any area. Try to stimulate them to take on the nursery function. We have people all over Australia now involved in single species or multi-species production. We have bamboo nurseries under way, aquatic nurseries under way, quail supplies under way, pigeon breeders. If you get your early clients to undertake this sort of function, then you can continually be recommending them as sources of supply to later clients.

In an area with many grasshoppers, a quinea fowl breeder does very well. You recommend guinea fowl can everybody. The same holds true for soil conditioners like the Wallace plow. If your early client can afford to do so, he should buy this tool. Then you continue to recommend him to later clients. In Permaculture Quarterly, we have a listing of all suppliers in district for all those items. Within 12 months to two years after you have started consultancy work, you should find that there is no trouble getting any species that you need, while at present, you don't even know where to start.

Along with your own clientele, who are largely suppliers, you are also able to locate suppliers within local garden groups. You can soon get a listing of people who will supply these oddities.

We also try, within district, to set up non-competitive client operations. We encourage people to concentrate more on what grows well on their property, and for others to leave the growing of that crop to them – let them grow this crop for the whole district. Imagine, for instance, that you have a very suitable patch for grain production – 12 acres. Tell all the other people around the district that so and so will produce the grain, while they get on with vegetables, or with fruit.

This is the very opposite of what has been happening under the agricultural department. They will fill a whole valley up with apple growers. They all go broke together, and they all boom together. What we should try to do is to seek out

something that is not in district for a farm that is very suitable for it, and a person who wants to grow it, and tell others to get on with something else that is not there. That is really regional self-sufficiency.

As a local consultant and designer, you can have a lot of influence.

Grain production suits humid area flatlands that are easily watered, and there is not much of that sort of land in any district. So those people would normally be raising more grain. I recommend to them that they go ahead and put grain there, then everybody else can get or-

chards on slopes. What you are really trying to do is plan the region, as well as the client's farm. You are setting it up as noncompetitive systems in which somebody, because they are producing most of the grain, has a market in the district.

Just a final word about the clients that you meet. Often they may be retired, steel workers or electronics people, for example. Very often you can recommend ways they can make use of their professional capacities. An itinerant accountant is a handy person to find. If your client is an itinerant accountant, you can recommend him to other clients. As

permaculture designers, your job is more than to attend to the physical layout of the farm; it also extends to the services that the client might render to the whole district. As an instance, I was very interested in the fact that the man who collected chestnuts had separated from these trees several really good seed trees. We advertised his seed in the Permaculture Quarterly. He told me that has been worth \$30,000 to him in seed orders, not only within Australia, but outside Australia. One touch like that, and maybe you have earned your fee 60 times over.

Resource List

The following groups and publications are selected from our directory, **TRIP** (The Resources of International Permaculture), Volume VI. For a more complete, updated listing, you can obtain **TRIP** in print or on disk from Yankee Permaculture. Please nominate other groups to be included in this list. This list was generated on: 3/6/99

City Farmer

Office of Urban Agriculture 318 Homer St. #801
Vancouver BC V6B 2V3 CANADA
Publications include: *Urban Home Composting:*Rodent-Resistant Bins and Environmental Health
Standards, Gardening with People with Disabilities,
School Garden Guidelines: How to Teach Children
about Nutrition and the Environment, and a color urban gardens poster.

FarmFolk/CityFolk Society

#208 - 2211 W. 4th Ave. Vancouver BC V6K 4S2 CANADA

Green Guerillas, Inc.

625 Broadway, 9th FI NY NY 10012 USA

Urban Harvest

(Former Dow School Bldg, 1900 Kane) POB 980460 Houston TX 77098-0460 USA "Building Healthy Communities Through Gardens and Orchards"

Urban Environment Laboratory

POB 1943 Providence RI 02912 USA

Hartford Food System

509 Wethersfield Ave. Hartford CT 06114 USA

EarthRight Institute

POB 1185

Norwich VT 05055 -1185 USA Environmental hot line for Northern New England (USA), 800 639-1552. Municipal energy-planning handbooks, fact sheets, etc. Environmental information, education and referral.

International Society of Arboriculture Catalog of Curricula in Arboriculture & Urban Forestry

POB GG

Savoy IL 61874-1033 USA

Publications include: Social Aspects of Urban Forestry, The Landscape Below Ground, Trees and Overhead Electric Wires, and New Careers in Arboriculture.

National Assn. for Urban Studies Streetwise

Brighton Polytechnic 68 Grand Parade Brighton BN2 2JY UNITED KINGDOM

Greentown Group

Urban Studies Center 553 Silbury Rd. Central Milton Keynes BucksMK9 3AR UNITED KINGDOM

Neighbourhood Use of Buildings & Space -NUBS

John Knights, Director
15 Wilkin St. London NW5 UNITED KINGDOM
"Voluntary groups taking local initiatives are not
usually in a position to employ the architectural and
planning help they may need because traditional
architectural practices are often not geared to cope
with the particular problems of the voluntary sector.
Without proper architectural drawings, and planning
advise and realistic costings a voluntary group is
unlikely to receive the financial support it needs from
the Local Authority or potential donor.

"NUBS was established in 1975 to help overcome these problems. Since then it has worked with over 90 voluntary groups, providing a unique service, developing their embryonic ideas for using the derelict land and buildings which litter the Inner City areas of our cities."

Toronto Food Policy Council

277 Victoria St. Rm. 203 Toronto ON M5B 1W1 CANADA

Henry George Foundation Land & Liberty

177 Vauxhall Bridge Rd. London SW1V IEŪ UNITED KINGDOM Promotes "...the economic and political philosophy of Henry George. ... He saw that mankind's fundamental economic and social dilemma was "How to apportion the land?' 2:37:30 PM Henry George saw that the solution was simply to permit individuals to lease the land from the state upon payment of an annual ground rent equivalent to at least 5% of the value of the land while at the same time reducing the taxes that weigh on enterprise. The Foundation conducts research into the application of Henry George's economics to present day economic and social problems. It maintains a library...and publishes a range of literature..., holds meetings and conferences, and campaigns to bring Henry George's philosophy before a wider public."

Urban Agriculture Network Urban Development Unit

United Nations Urban Development Programme One UN Plaza, DC1-2080 NY NY 10017 USA

International Water and Sanitation Centre WHO

POB 93190

2509 AD The Hague NETHERLANDS "IRC has a publication series, a documentation unit, and works in developing countries [sic.]."

Center for Neighborhood Technology Neighborhood Works, The

2125 W North Ave Chicago IL 60647 USA

Agricultural Initiative

Center for Citizen Iniatives - CCI 3283 Sacramento St. San Francisco CA 94115 USA Promotes self-sufficiency and increased food production in the former Soviet Union through rooftop gardens, small-scale agricultural enterprises, etc.

Green City Program Green City Calendar

c/o Sabrina Merlo, Planet Drum Found. POB 31251 San Francisco CA 94131 USA

Arboricultural Journal

A B Academic Publishers POB 42

Bicester Oxon OX6 7NW UNITED KINGDOM Summaries in French and Spanish. Urban forestry.

Arboricultural Association Arboricultural Journal Journal of Urban Forestry

Ampfield House Ampfield, Romsey HampshireSO51 9PA UNITED KINGDOM

Urban Enviornment Centre, The

16 Howland Rd. Toronto ON M4K 2Z6

CANADA

Urban Ecology Australia Inc.

Centre for Urban Ecology 83 Halifax St. Adelaide SA 5000 AUSTRALIA Ecological city. Formerly listed as The Halifax Project.

National Federation of City Farms

The Greenhouse

Hereford St Bedminster Bristol BS3 4NA UNITED KINGDOM

An extensive network of urban food systems (both plants & animals) set up and managed by local communities.

American Community Gardening Assn. - ACGA

Community Greening Review

325 Chestnut St.

Philadelphia PA 19106-2777 USA Volunteers & professionals "promote gardening and greening in urban, suburban, and rural America."

Center for Urban Education about Sustainable Agriculture - CUESA The Bay Area Urban Gardening and Greening Directory

1417 Josephine St. BerkeleyCA 94703 USA "...lists over 100 projects and organizations in the San Francisco area doing work in areas such as farmers' markets, community gardens, horticultural job training, and children's gardens.

New York City Street Tree Consortium

44 Worth St. The Mezzanine NY NY 10013 USA Street tree care training, pruning course.

Wave Hill

675 W 252 St. Bronx NY 10471 USA Urban reforestation.

Center for Sustainability

133 Willard Bldg. Univ. Park PA 16802 USA

GREEN Institute, The

1433 E Franklin Ave. #7B
Minneapolis MN 55404-2135USA
Programs include an "ecoindustrial" park, a
"business incubator," an urban environmental
learning center, materials exchange and reuse, and
energy technology.

Projeto Aldeia Global

Rua da República - 71 Novo Hamburgo RS 93315540 BRAZIL A non profit organization dedicated to support the development of Eco-Villages.

Parks Council, The

457 Madison Ave. NY NY 10007 USA

Protect & enhance parks, open space, shore.

Operation Greenthumb

NYC Dept. General Services 49 Chambers St. Rm. 1020 NY NY 10007 USA

"Land Reclamation Program" turns vacant lots into meadows. "Provides free technical & design assistance, fencing, tools, lumber, soil, fruit trees, shrubs, special assistance to educational garden projects." Publishes resource list of other New York City gardening support groups.

Open Space Greening ProgramCouncil on Environment, NYC

51 Chambers St. NY NY 10007 USA Advice and workshops on gardening. Garden reference library. Tool & book lending library. Green Bank Program provides matching funds.

Open Space Institute, The

666 Broadway 9th Fl. NY NY 10012 USA

Bronx Green-Up Program

NY Botanical Garden, Watson Bldg. Rm. 317 200 St. & Southern Blvd. Bronx NY 10458 USA

Technical assistance, resource referrals, training program, truck service for garden materials, free soil & plants when available. Bronx sites only.

Bronx Frontier Development Corp.

851 Barretto St.

Bronx NY 10474 USA

Urban composting. Demonstration garden. Limited technical help on gardening. Bronx-based groups can pick up one free load of compost or wood chips.

Magnolia Tree Earth Center

677 Lafayette Ave. Brooklyn NY 11216 USA Horticultural technical assistance. Workshops for school children.

Neighborhood Open Space Coalition

71 W 23rd St. #508 NY NY 10010-4102 USA

American Forestry Association Urban Forests

American Forests

POB 2000 Washington DC 20013 USA

Urban Agriculture Network, The

1711 Lamont St. NW Washington DC 20010-2601 USA More than 6,500 NGOs in 65 countries networking around the issue of urban food production.

Urban Options

Attn: LeRoy Harvey 405 Grove St.

E Lansing MI 48823 USA

"We have an energy & environmental demonstration house and information center."

Urban Forest Institute

Box 415

Honaunau HI 96726 USA

Seattle Tilth Association

4649 Sunnyside N Rm 1 Seattle WA 98103 USA

Trains composting teachers, operates demonstration compost system, gardens, greenhouse. Produces printed guides to establish similar programs in other areas and distributes slide shows. Publishes monthly newsletter and several Northwest (USA) gardening books.

Institute for Sustainable Cities

485 Leatherfern Pl. Sanibel FL 33957USA

"Developing strategies for environmentally sound, socially just urban redevelopment. Key areas: urban farming, sustainable transportation; proximity policies, urban wildlife, community economics."

Permaculture in Action

c/o Jeremy Burnham

POB 235Noordhoek 7985 SOUTH AFRICA "...offers training & support in permaculture and 'city villages' around Southern Africa, including Malawi and Namibia."

Permakultur Austria Permakultur

c/o Inst. für Freiraumgestaltung & Landschaftspflege, Abbeitsbereich Freiraum Univ. für Bodenkultur Wien Peter Jordan-Straße 82 A-1190 Vienna AUSTRIA "Our purpose is to support permaculture and its

"Our purpose is to support permaculture and its application in Austria. We offer consultancy, lectures, introductory and design courses, a seed

service, library, book sale and a plant exchange. We have...sub groups working on bioregional development and urban permaculture. [We have] started...our first demonstration sites. We translate and publish texts relevant to permaculture and we publish a quarterly newsletter. People joining this work are highly welcome."

Vancouver Permaculture Network

Attn: Harold Waldock 9641 139th St.

Surrey BC V3T 5H3 CANADA

Alternate address: Siobhan Ryan: 3721 Beatrice street Vancouver. Vancouver Permaculture Network hosts PC courses, has now a regular meeting schedual at Cotton Wood Gardens

Environmental Building News Environmental Building Design

Alex Wilson, Editor & Publisher 28 Birge St.

Brattleboro VT 05301 USA

Bimonthly newsletter on environmentally responsible building for builders and designers.

IMAGO News

553 Enright Ave. Cincinnati OH 45205 USA

Eco-Home *Ecolution*

Attn: Julia Russell 4344 Russell Ave. Los Angeles CA 90027 USA "Demonstration home of urban, ecological living. Tours."

Earth Connection *EC News*

370 Neeb Rd.

Cincinnati OH 45233-5101 USA

"...a place where people from all over...can...learn about solar design construction, water conservation, and other measures to help us all live more 'lightly' on this magnificent Earth, as well as to probe the deep spiritual meaning of eco-sensitive living."

Sustainable Resources Center, The; Urban Lands Program Urban Gardener

1916 2nd Ave. S

Minneapolis MN 55403 USA

A non-profit involved in energy, land and food issues and community gardens in the Twin Cities.

Urban Ecology Urban Ecologist, The

405 14th St. #701 Oakland CA 94612-2706 USA

Excellent information!

Permaculture Institute of New Zealand - PINZ

POB 56-107, Dominion Rd. Auckland 1003 NEW ZEALAND

Center for Popular Economics

POB 785

Amherst MA 01004 USA "Economics education for activists."

Trust for Public Land - NYC Land Project - TPL

Mid-Atlantic Regional Office 666 Broadway 9th Fl. NY NY 10012 USA Legal support for community garden preservation.

3. ...

Boston Urban Gardeners - BUG

46 Chestnut Ave. Jamaica Plain MA 02130-0192 USA

Los Angeles Eco-Village Los Angeles Eco-Village News

3551 White House PI. Los Angeles CA 90004 USA An urban ecovillage.

Biological Urban Gardening Services - BUGS

BUGS Flyer - The Voice of Ecological Horticulture.

POB 76 Citrus Heights CA 95611-0076 USA "an international membership organization devoted to reducing/eliminating the use of synthetic chemicals (pesticides and fertilizers) in urban landscapes. The major service BUGS provides to its members is education through our quarterly newsletter and catalog of educational brochures dealing with ecological horticulture." Quarterly newsletter.

Center for Urban Horticulture

Miller Library, Univ. of Washington Box 354115

Seattle WA 98195-4115 USA

"...research, teaching, and public service concerning the selection, management, and role of plants and of ecosystems in urban landscapes."

San Francisco League of Urban Gardening - SLUG

2088 Oakdale Ave San Francisco CA 94124 USA

Shelterforce

National Housing Institute 439 Main St. #311 Orange NJ 07050-1523 USA "Nat'l cross-disciplinary mag. for community development activists."

Permaculture Implementation Guild of Seattle – PIGS

POB 45472 Seattle WA 98145-5472 USA

Permaculture Community Action – Worknet 104 Bridlewood Blvd Agincourt ON M1T1R1 CANADA

This has been a fairly selective listing. For more leads, see TRIP directory.